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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/753,483      | 01/09/2004  | Sumio Okuno          | 648.41258CX1        | 6885             |

20457 7590 10/28/2004

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EXAMINER


JULES, FRANTZ F

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

3617

DATE MAILED: 10/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/753,483 | <b>Applicant(s)</b><br>OKUNO ET AL.  |  |
|                              | <b>Examiner</b><br>Frantz F. Jules   | <b>Art Unit</b><br>3617  |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-12 is/are rejected.
- 7) ☒ Claim(s) 5-6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>01092004</u> . | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Pavlick et al (US 4,715,292).

#### **Claim 10**

Pavlick et al teach all the limitations of claim 16 by showing in figs. 1-8 a railway car formation comprising plural car bodies being connected, characterized in that both ends (16, 20) of a respective car body of the railway car formation, constituting a portion of a passenger room (102) are equipped with parts that shrink as shown in fig. 5 in the longitudinal direction of said respective car body when said respective car body collides against another car body being adjacent thereto.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1-4, 7-9, 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pavlick et al (US 4,715,292) in view of Torke (US 3,983,962).

Claims 1-4, 7-9, 11-12

Pavlick et al discloses a railway car comprising an underframe (A), side structure (B) and a roof structure (C), characterized in that in the underframe (A), the material used to form both longitudinal ends (16, 20) of the car body is softer than the material used to form the longitudinal center.

Members constituting the floor portion as well as side sill members (120, 136, 148) and the underframe are selected such that the material used to form both end areas of the members, which depicts both front end section and rear end section of the rail car being collapsible as well as tubular members (136, 148).

Pavlick disclose all of the features as listed above but does not disclose a railway car wherein in the underframe, material used to form both longitudinal ends being formed by annealing. The general concept of using the process of annealing a material used in a vehicle for the purpose of absorbing energy is well known in the art as illustrated by Torke which discloses the use of annealing process in the softening a frame member used for energy absorbing purpose, see fig. 1, col. 1, lines 5-8, lines 48-51, lines 55-57, lines 64-68. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Pavlick et al to include the use of material softened by annealing process in both longitudinal ends of the underframe of the railway car as taught by Torke in order to increase the buckling resistance of the frame member, prevent

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perpendicular extension of corrugation to the bending edge of the frame members thereby increasing safety during a collision.

#### Claim 7

Regarding using longitudinal ends of the railroad car that extend 100 to 500 mm as recited in claim 7, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Pavlick et al to include the use of longitudinal ends of the railroad car that extend 100 to 500 mm in his advantageous system, as end bumper sizing is a common and everyday occurrence throughout the railroad car design art and the specific use of longitudinal ends of the railroad car that extend 100 to 500 mm would have been an obvious matter of design preference depending upon such factors as the intensity of the impact loading, the yield strength of the front end material; the targeted weight of the railroad car; the ordinarily skilled artisan choosing the best stress profile corresponding to a particular loading imposed on the side walls which would most optimize the cost and performance of the device for a particular application at hand, based upon the above noted common design criteria.

#### ***Allowable Subject Matter***

5. Claims 5-6 are objected for the informalities as listed above but would be allowable if rewritten to overcome the above listed informalities.

#### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantz F. Jules whose telephone number is (703) 308-

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8780. The examiner can normally be reached on Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph S. Morano can be reached on (703) 308-0230. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

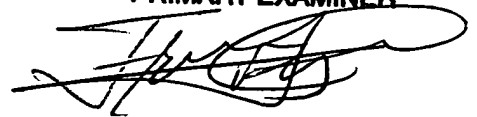
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Frantz F. Jules  
Primary Examiner  
Art Unit 3617

FFJ

October 26, 2004

**FRANTZ F. JULES**  
**PRIMARY EXAMINER**

A handwritten signature in black ink, appearing to read 'Frantz F. Jules', written over the printed name and title.